

AMENDMENTS TO THE CLAIMS

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 3, 11, 12, 17, and 21 to read as follows:

1-2. (CANCELLED)

3. (CURRENTLY AMENDED) A method of reproducing data from a disc in a disc-reproducing system, ~~the method comprising:~~

~~(a)~~ positioning a pick-up at a ~~predetermined~~ specified position on the disc and counting a number of track traverse pulses which are generated when a tracking loop is switched to "OFF" at ~~an arbitrary~~ a first speed factor and a second speed factor;

determining whether the disc is one of axially eccentric and mass eccentric using the counts at the first and second speed factors;

~~(b)~~ varying a speed factor of reproducing data from the disc according to the type of disc eccentricity, ~~by comparing the number of track traverse pulses with a predetermined base value~~; and

~~(c)~~ maintaining the pickup in a fixed position while counting the number of track traverse pulses.

4-10. (CANCELLED)

11. (CURRENTLY AMENDED) ~~A~~ A method of reproducing data from a revolving disc in a disc-reproducing system, comprising:

counting a number of track traverse pulses at a first revolving speed;

counting a number of track traverse pulses at a second revolving speed, ~~wherein the second revolving speed is~~ being approximately 24 times the first revolving speed;

determining a frequency of vibration of the disc by comparing the number of track traverse pulses counted at the first revolving speed with the number of track traverse pulses counted at the second revolving speed;

comparing the determined frequency of vibration of the disc with a predetermined base value; and

revolving the disc at a reproducing speed based upon the comparison of the determined frequency of vibration with the predetermined base value;

wherein; the reproducing speed is decreased with increased frequency of vibration, the reproducing speed ~~is being~~ approximately 16 times the first revolving speed when the frequency of vibration is determined to be greater than or equal to 80Hz, the reproducing speed ~~is being~~ 20 times the first revolving speed when the frequency of vibration is determined to be greater than or equal to 40Hz and less than 80Hz, and the reproducing speed ~~is being~~ 24 times the first revolving speed when the frequency of vibration is determined to be less than 40Hz.

12. (CURRENTLY AMENDED) The method of reproducing data from a disc in a disc-reproducing system of claim 11, wherein the disc further comprises an inner circumference and ~~the disc-reproducing disc-reproducing system includes tracking comprising having~~ "OFF" and "ON" states, further comprising:

switching tracking in the disc-reproducing system to the "OFF" state; and
checking the innermost circumference of the disc.

13. (ORIGINAL) The method of reproducing data from a disc in a disc-reproducing system of claim 12, wherein the counting of track traverse pulses at the first revolving speed and the second revolving speed comprises counting the track traverse pulses at a predetermined time after checking the innermost circumference of the disc.

14. (ORIGINAL) The method of reproducing data from a disc in a disc-reproducing system of claim 13, wherein the predetermined time after checking the innermost circumference of the disc is approximately equal to a time for the disc to complete two revolutions.

15. (ORIGINAL) The method of reproducing data from a disc in a disc-reproducing system of claim 13, wherein the predetermined time after checking the innermost circumference of the disc is approximately 100ms.

16. (CANCELLED)

17. (CURRENTLY AMENDED) An apparatus for reproducing data from a disc inducing vibration, ~~the apparatus comprising:~~

a pick-up unit maintaining a fixed position while detecting a tracking traverse signal;
a signal comparator comparing the tracking traverse signal with a base signal and then generating a tracking traverse pulse signal comprised of at least one tracking traverse pulse;
and

a control unit ~~that~~ which counts the number of track traverse pulses generated ~~in the signal comparator~~ at a first revolving speed of the disc and ~~also~~ at a second revolving speed of the disc, ~~determines a frequency of vibration of the disc based upon whether the disc is one of axially eccentric and mass eccentric using the track traverse pulse counts at the first and second revolving speeds,~~ and changes a speed of the disc ~~based upon the frequency of vibration of the disc~~ according to the type of disc eccentricity.

18. (ORIGINAL) The apparatus for reproducing data from a disc inducing vibration of claim 17, wherein the pick-up unit further comprises a tracking "OFF" state and a tracking "ON" state, and the pick-up unit detects a tracking traverse signal by revolving the disc in the tracking "OFF" state.

19. (ORIGINAL) The apparatus for reproducing data from a disc inducing vibration of claim 18, further comprising a signal amplifying unit to differentially amplify the tracking traverse signal detected in the pick-up unit prior to sending the signal to the signal comparator.

20. (ORIGINAL) The apparatus for reproducing data from a disc inducing vibration of claim 19, wherein the control unit counts the number of track traverse pulses at a predetermined time.

21. (CURRENTLY AMENDED) ~~The apparatus for reproducing data from a disc inducing vibration of claim 20~~An apparatus for reproducing data from a disc inducing vibration,
comprising:

a pick-up unit maintaining a fixed position while detecting a tracking traverse signal;
a signal comparator comparing the tracking traverse signal with a base signal and then
generating a tracking traverse pulse signal comprised of at least one tracking traverse pulse;
and

a control unit that counts the number of track traverse pulses generated in the signal
comparator at a first revolving speed of the disc and also at a second revolving speed of the
disc, determines a frequency of vibration of the disc based upon the track traverse pulse
counts, and changes a speed of the disc based upon the frequency of vibration of the disc,

wherein the pick-up unit further comprises a tracking "OFF" state and a tracking "ON"
state, and the pick-up unit detects a tracking traverse signal by revolving the disc in the
tracking "OFF" state,

wherein the control unit counts the number of track traverse pulses at a predetermined
time, and

wherein the predetermined time for counting the number of track traverse pulses is
approximately 100ms after checking an innermost circumference of the disc.